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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,628	06/24/2003	Yukio Kinoshita	840.42873X00	1148
20457	7590	05/05/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			TRAN, DIEM T	
		ART UNIT	PAPER NUMBER	
			3748	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/601,628	KINOSHITA, YUKIO
	Examiner Diem Tran	Art Unit 3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date, ____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____.

## DETAILED ACTION

### ***Specification***

The disclosure is objected to because of the following informalities:

- On page 6, line 6, "volt age" should be changed to --voltage--.
- On page 7, line 18, "di scharge" should be changed to --discharge--.
- On page 10, line 11, "subst ance" should be changed to --substance--.
- On page 10, line 25, "e lectrode" should be changed to --electrode--.
- On page 12, line 5, "n oble" should be changed to --noble--.
- On page 12, line 13, "he at" should be changed to --heat--.
- On page 12, line 17, "i nsulation" should be changed to --insulation--.
- On page 12, line 20, "a pparatus" should be changed to --apparatus--.
- On page 12, line 24, "collecti on" should be changed to --collection--.
- On page 15, line 23, "con ditions" should be changed to --conditions--.

Appropriate corrections are required.

### ***Claim Objections***

Claims 1, 4, 5 are objected to because of the following informalities:

- In claims 1, 4, 5, line 1, the uses of "etc." need to be removed.
- In claim 5, the claimed limitation "at least one interference box for mitigating and averaging a change of a flow in a front stage" should be incorporated to the specification. Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-3, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Dettling et al. (US Patent 4,693,078).***

Regarding claims 1, 2, Dettling discloses an exhaust gas processing apparatus used in a diesel vehicle characterized in that by arranging in a front stage of a processing system or arranging together, at least one centrifugal separation machine (38) such as a cyclone is provided, whereby a particle shape substance in an exhaust gas is caught (see Figure 1, col. 3, lines 46-56).

Regarding claim 3, Dettling further discloses that improving said at least one centrifugal separation machine such as said cyclone, an air pressure generation apparatus (29) is constituted in said processing system (see col. 4, lines 8-11).

Regarding claim 6, Dettling further discloses that said cyclone is combined with an electric dust collection apparatus in said processing system (see Figure 1).

***Claims 4, 5, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dettling et al. (US Patent 4,649,703).***

Regarding claim 4, Dettling discloses an exhaust gas processing apparatus used in a diesel vehicle characterized in that by arranging in a front stage of a processing

system or arranging together, using an anti -environment material, and at least a heater, is provided (see col. 9, lines 45-60).

Regarding claims 5, 7, Dettling discloses exhaust gas processing apparatus used in a diesel vehicle characterized in that to catch and decompose a particle shape substance in an exhaust gas and a substance containing NOx etc., at least one interference box for mitigating and averaging a change of a flow in a front stage of a processing system is provided (see Figure 1).

### Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (703) 308-6073. The examiner can normally be reached on Monday -Friday from 8:00 a.m. - 5:30p.m.

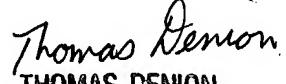
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



Diem Tran  
Patent Examiner  
Art unit 3748

DT  
April 30, 2004



Thomas Denion  
THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700